US-PAT-NO: 6104861

DOCUMENT-IDENTIFIER: US 6104861 A

TITLE: Encoding and decoding of data streams of multiple types
                including video, audio and subtitle data and searching
                therefor

--------- KWIC --------

Abstract Text - ABTX (1):
    Multiple data stream **searching** is achieved by encoding a video broadcast
into multiple types of data **streams including video,** audio and subtitle data.
Addresses are generated for each of the data streams pointing to a position of
the data stream to be stored on a record medium. These addresses are stored in
areas of the record medium reserved by type of data stream such that location
of any event represented by data in a data stream can be achieved by locating
the data streams of the same type as that of the data to be located. A
computer-readable memory directs a computer to store these addresses and to
decode data streams at these addresses which correspond to the type of data
stream to be searched. The data streams which are of the type to be searched
are decoded and the event to be searched is found in these decoded data
streams.

Application Filing Date - AD (1):
    19960718

Brief Summary Text - BSTX (21):
    The present invention further provides a decoding apparatus and method which
decodes multiple types of data **streams such that an event in the video**
broadcast represented by data in the data streams can be **searched by searching**
data streams of the same type as the data to be **searched**.

Detailed Description Text - DETX (41):
    Any scene in the video image or audible speech can be searched. To that
end, the present invention distinguishes between multiple types (such as video,
audio and subtitle types) of data streams (such as video, audio or subtitle
data). Thus, for example, when a scene is **searched,** the system controller
causes the subtitle decoder to decode only the subtitle data **streams describing**
the video data. Similarly, when a sound is to be located, the system
controller causes the subtitle decoder to decode only the subtitle data streams
describing the audio data. The system controller operates by determining where
the streams of the multiple types of data streams are located on the disk and
causing the respective data streams for the type searched to be reproduced and
sent to the decoder.

Claims Text - CLTX (5):
    wherein an event represented by video or audio data in the data streams can
be located by **searching** the subtitle data **streams associated with the
respective video** or audio data to be located.

Claims Text - CLTX (17):
    wherein an event represented by video or audio data in the data streams can
be located by **searching** the subtitle data **streams associated with the
respective video** or audio data to be located.

Claims Text - CLTX (28):
    storing said addresses in a predetermined area of said recording medium,
wherein an event represented by video or audio data in the data streams can be
located by **searching** the subtitle data **streams associated with the respective
video** or audio data to be located.

Claims Text - CLTX (34):
    control means for controlling said decoding means to decode data streams of
the subtitle type which are to be displayed exclusively during a **search,** such
that any event represented by video or audio data in the data streams is
locatable by **searching** the subtitle data **streams associated with the respective
video** or audio data to be located.

Claims Text - CLTX (40):
    controlling said decoding to decode data streams of the subtitle type which
are to be displayed exclusively during a **search,** such that any event
represented by video or audio data in the data streams is locatable by
searching the subtitle data **streams associated with the respective video** or
audio data to be located.